

Appendix table 4-32.

Company and other non-Federal funds for U.S. industrial R&D performance, by industry and size of company:**1997-99**

(Millions of current dollars)

Industry ^a	NAICS code	1997 ^b	1998 ^b	1999
Distribution by industry				
All industries	21-23, 31-33, 42, 44-81	133,611	145,016	160,288
Manufacturing	31-33	—	—	99,865
Food	311	1,244	1,305	1,132
Beverage and tobacco products	312	447	384	D
Textiles, apparel, and leather	313-16	378	399	334
Wood products	321	26	55	70
Paper, printing and support activities	322, 323	2,252	1,660	2,474
Petroleum and coal products	324	1,349	1,390	D
Chemicals	325	16,385	18,733	20,051
Basic chemicals	3251	1,840	3,467	2,648
Resin, synthetic rubber, fibers, and filament	3252	1,802	1,995	2,216
Pharmaceuticals and medicines	3254	10,213	9,601	12,236
Other chemicals	325 minus (3251-52, 3254)	2,530	3,670	2,951
Plastics and rubber products	326	1,480	1,625	1,785
Nonmetallic mineral products	327	546	D	595
Primary metals	331	754	588	457
Fabricated metal products	332	1,854	1,727	1,608
Machinery	333	5,470	5,831	5,658
Computer and electronic products	334	29,697	31,873	29,939
Computers and peripheral equipment	3341	7,718	8,276	4,126
Communications equipment	3342	2,751	8,456	5,797
Semiconductor and other electronic components	3344	14,033	9,072	10,624
Navigational, measuring, electromedical, and control instruments	3345	4,659	5,483	8,632
Other computer and electronic products	334 minus (3341-42, 3344-45)	537	585	760
Electrical equipment, appliances, and components	335	2,580	2,139	3,820
Transportation equipment	336	21,713	20,677	23,928
Motor vehicles, trailers, and parts	3361-63	14,340	13,781	17,987
Aerospace products and parts	3364	6,961	6,521	5,309
Other transportation equipment	336 minus (3361-64)	412	375	632
Furniture and related products	337	240	211	248
Miscellaneous manufacturing	339	3,447	3,888	3,825
Medical equipment and supplies	3391	3,031	3,363	3,251
Other miscellaneous manufacturing	339 minus 3391	416	525	574
Other manufacturing	31-33 minus (311-16, 321-27, 331-37, 339)	23	D	0
Small manufacturing companies ^a	31-33 (with fewer than 50 employees)	2,357	2,188	2,950
Nonmanufacturing	21-23, 42, 44-81	—	—	60,423
Mining, extraction, and support activities ..	21	447	458	2,352
Utilities	22	209	177	126
Construction	23	241	445	690
Trade	42, 44, 45	15,862	16,415	19,521
Transportation and warehousing	48, 49	662	253	460
Information	51	10,191	13,025	14,892
Publishing	511	7,535	9,522	11,253
Newspaper, periodical, book, and database	5111	340	334	371
Software	5112	7,194	9,188	10,882
Broadcasting and telecommunications ...	513	2,139	1,788	1,393
Radio and television broadcasting	5131	D	D	D
Telecommunications	5133	D	1,710	D
Other broadcasting and telecommunications	513 minus (5131, 5133)	12	D	18

See explanatory notes, if any, and SOURCE at end of table.

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(Millions of current dollars)

Industry ^a	NAICS code	1997 ^b	1998 ^b	1999
Other information	51 minus (511, 513)	518	1,716	2,246
Finance, insurance, and real estate	52, 53	1,326	1,700	1,570
Professional, scientific, and technical services	54	9,380	11,440	14,379
Architectural, engineering, and related services	5413	1,152	1,405	2,402
Computer systems design and related services	5415	2,995	2,861	3,989
Scientific R&D services	5417	4,688	6,446	7,413
Other professional, scientific, and technical services	54 minus (5413, 5415, 5417)	544	728	575
Management of companies and enterprises	55	309	417	72
Health care services	621–23	635	584	631
Other nonmanufacturing	56, 61, 624, 71, 72, 81	911	2,095	752
Small nonmanufacturing companies ^a	21–23, 42, 44–81 (with fewer than 15 employees)	1,569	2,327	4,977
Number of employees		Distribution by size of company		
Total		133,611	145,016	160,288
5 to 25		2,836	4,305	6,393
25 to 49		2,745	2,857	4,382
50 to 99		3,819	5,834	6,623
100 to 249		6,606	7,494	6,540
250 to 499		5,848	6,249	7,407
500 to 999		4,590	5,132	6,441
1,000 to 4,999		19,049	20,905	23,944
5,000 to 9,999		13,655	13,517	14,182
10,000 to 24,999		20,597	23,921	24,525
25,000 or more		53,866	54,802	59,852

NAICS = North American Industry Classification System; — = Data not tabulated under NAICS code; D = data have been withheld to avoid disclosing operations of individual companies

^aThe frame from which the statistical sample was selected was divided into two partitions based on total company employment. In the manufacturing sector, companies with 50 or more employees were included in the large company partition. In the nonmanufacturing sector, companies with 15 or more employees were included in the large company partition. Companies in the respective sectors with employment below these values but with at least five employees were included in the small company partition. The purpose of partitioning the sample this way was to reduce the variability in industry estimates largely attributed to the random year-to-year selection of small companies by industry and the high sampling weights that sometimes were assigned to them. Because of this, detailed industry statistics were possible only from the large company partition. Statistics from the small company partition are shown separately and are included in manufacturing, nonmanufacturing, and all industries totals.

^bThe totals for “all industries” are identical to corresponding totals previously published using the Standard Industrial Classification (SIC) system. Detail published using NAICS may not add to total. See NOTES.

NOTES: Starting with the 1999 survey, estimates are based on NAICS. In prior years, estimates were based on the SIC system. For this table, companies in the 1997 and 1998 surveys were assigned NAICS industry codes based on their SIC industry codes. Consequently, the estimates for 1997 and 1998 in this table are not representative of the NAICS categories of industries in those years. They are included for comparison purposes only. R&D in this table is the industrial R&D performed within company facilities funded from all sources except the Federal Government. The funds are the company's own; funds from outside organizations include funds from other companies, research institutions, universities and colleges, nonprofit organizations, and state governments. Excluded from this table are R&D not performed within the company (e.g., R&D contracted out to other organizations) and R&D not performed in the United States (e.g., R&D not performed on U.S. soil by foreign subsidiaries or other foreign organizations).

SOURCE: National Science Foundation, Division of Science Resources Studies (NSF/SRS), *Research and Development in Industry: 1999*, Early Release Tables (Arlington, VA, 2001)